UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

To: Michael L. Goodis, Director
Registration Division
Office of Pesticide Programs

From: Marion Johnson, Chief
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Registration Division

Subject: Repeat Section 18 Emergency Exemption Requests for Bifenthrin on Apple, Peach, and Nectarine to Control the Brown Marmorated Stink Bug in North Carolina

This is the sixth year that emergency exemption requests have been submitted for the use of bifenthrin on apple, peach, and nectarine to control the brown marmorated stink bug (BMSB). Exemptions for use were authorized for 2017 on 4-20-17, and exemptions for this use were authorized to DE, MD, NC, NJ, NY, PA, VA, and WV for the past five years (2012-16, except for NY, who did not request in 2012). The use patterns requested this year are identical to those from the past five years. The following table summarizes acres authorized for treatment and estimates of actual acres treated under the past exemptions. Acreage treated has generally been lower than requested, and State contacts indicate that the BMSB populations have been variable, with high levels in some areas but low in others. They suggest that greater availability of wild alternative host plants may have alleviated some of the pressure and damage to fruit trees in years with more rainfall. Fewer available wild host plants were available in years with drier conditions and BMSB outbreaks in fruit trees seemed higher in those years.

Bifenthrin Section 18s for Apple, Peach, and Nectarine for BMSB Control

State	*Acres Authorized*	*Treated 2012*	*Treated 2013*	*Treated 2014*	*Treated 2015*	*Treated 2016*
DE	415	-0-	-0-	-0-	-0-	-0-
MD	3,570	2,500	3,000	2,900	2,700	2,400
NC	4,000	-0-	250	350	400	3,500
NJ	8,100	100	1,840	3,080	*not rec'd*	*not rec'd*
NY	5,900	--n/a--	1,239	1,239	1,642	*not rec'd*
PA	24,973	725	144	144	-0-	3,500
VA	29,000	5,211	1,635	4,116	5,050	3,800
WV	5,986	125	-0-	1,960-4,900	1,960-4,900	1,900

Acres treated are primarily estimates based on registrant sales data; requests (and use reports) expected but not yet received from NY; NJ did not request in 2016

The listed states, with the exception of New York, have also requested and received use of dinotefuran under emergency exemptions since 2011. Michigan also obtained use of dinotefuran for the first time in 2013-15, but has not requested bifenthrin.

The BMSB, a recently established invasive pest, continues to pose a threat to pome and stone fruit trees in the US. There are no known natural enemies in the US to help regulate populations, and limited available pesticide controls which are not adequate to provide suitable season-long control. In 2010, the BMSB populations occurred at damaging levels in the US, and USDA named it a national priority, forming a workgroup to research management of the BMSB. **For further details, the Decision Memorandum for the 2012 requests is attached.**

BEAD's review of the 2012- 2013 requests indicated that an emergency condition exists with respect to control of BMSB on stone and pome fruit, and without adequate control, significant economic losses were likely. BEAD has been informally consulted in subsequent years and confirms that the situation will remain an emergency until there is adequate control of the BMSB available, either through new registrations or cultural practices.

EFED's review of the 2012-13 requests estimated minimal risks for plants, mammals, and birds, but noted potential concern for aquatic organisms and pollinators. EFED indicated that risks from the proposed use would be similar to those posed by the registered uses, and recommended that the requirements on the section 3 labels for buffer zones and vegetative strips around aquatic environments be strictly followed, along with provisions on the section 18 use directions related to protection of pollinators.

In 2014, HED provided updated acute dietary risk estimates using 2012 preliminary PDP sampling data, new percent of crop treated figures (2014) for apple, peach, nectarine, and pear, and incorporating processing factors; all dietary risk estimates remained below the Agency's level of concern (<100% aPAD). The updated estimates are as follows: for the most highly exposed population subgroup, infants (<1 year old) 55.5% of the aPAD (previously 29%); and for the general US population, 7.1% of the aPAD (previously 5%). Non-dietary risks remain unchanged from HED's 2012 assessment. The time-limited tolerances established for apple, peach, and nectarine at 0.5 ppm in connection with past exemptions are set to expire on December 12, 2018, are adequate to cover any residues that might result from the uses under section 18 exemptions, and will be extended if needed. More recently (2016), HED preliminarily reviewed additional PDP data collected in 2014, and indicated that the residues appeared to all be significantly lower than those used in the previous risk assessment. Thus, it is likely an updated risk assessment will result in lower risk estimates.

MUERB has confirmed that the need still exists for additional materials to adequately control the BMSB when outbreaks occur in pome and stone fruits, and there do not appear to be any outstanding risk data that might undermine the previous safety findings. The MUERB analyst confirmed that these requests meet the criteria for the re-certification program.

IR-4, in cooperation with the registrants, is supporting registration of these uses and submitted a tolerance petition to EPA in 2016 which is currently undergoing review. The PRIA target completion date is 9/25/17. In early 2017, HED indicated that interruption in contractor support delayed their review, but they anticipate completion in time to meet the PRIA deadline (potentially by May).

Therefore, I recommend that the attached action be approved. In the event that these emergency uses are requested next year, MUERB is recommending that they be retained on the re-certification eligibility list. The attached letter conveys a preliminary determination of eligibility for the 2018 growing season.